

MICROPALAEONTOLOGY NOTEBOOK

David Ure and the first illustrations of British fossil Ostracoda

MICHAEL C. KEEN

Department of Geology & Applied Geology
University of Glasgow
Glasgow G12 8QQ UK.

1993 is the bicentenary of the publication of David Ure's classic work, *The History of Rutherglen and East-Kilbride*, published with a view to promote the study of antiquity and natural history, and with it the start of studies in Britain of fossil ostracods. To commemorate this occasion, the 2nd. European Ostracodologists Meeting was held in the University of Glasgow July 23-27th, 1993.

David Ure was born in 1750 the son of a weaver, a product of the Scottish enlightenment, who studied at Glasgow Grammar School and then at the University of Glasgow. He was licensed to preach the gospel in 1783, and soon after was appointed Assistant Minister at East Kilbride, where he remained for seven years. During this time he collected material for his great work which was published after he had left East Kilbride for Newcastle.

David Ure's book was financed by public subscription, and amongst the 700 subscribers can be found many Professors from the Scottish Universities as well as the eminent geologists James Hutton and John Playfair. This was the heroic age of geology, when careful observations were leading to an understanding of basic principles. David Ure is often regarded as the "Father of Scottish Palaeontology". His book contains the first illustrations of fossils from Scotland, and is fairly unique for the period because his specimens are still preserved in the collections of the Hunterian Museum at the University of Glasgow and the City Museum and Art Gallery, Kelvingrove, Glasgow. The macrofossils are beautifully drawn, making it possible to match many of the specimens with his illustrations (see Burns, 1993, Fig.2). In his book, Ure mentions the collections of William Hunter, who died in 1783, and whose collections were bequeathed to the University of Glasgow to form the basis of the Hunterian Museum. William, and his brother John, were natives of East Kilbride, giving yet another link in the chain of these early Scottish naturalists. Ure's collections were eventually given to the Royal Society of Edinburgh in 1843, and passed on to the Hunterian Museum in 1910 (Burns 1993).

Although he described the ostracods as being "the most uncommon" of his fossils, he made a large collection, stating that this "might furnish abundance of specimens for all the museums in Europe." The specimens in the Hunterian Museum are preserved in separate slides, but those in the City Museum and Art Gallery are preserved in a very unusual mount, a pedestal urn cut in cardboard with six circular cells cut into the rim of the urn.

David Ure made no direct contribution to our understanding of ostracods. He did not realise what they were, referring to them as "microscopic shells". His outlook on fossils in general, however, was thoroughly modern, regarding them as the remains of once-living organisms, and believing the Carboniferous rocks to be the product of marine deposition. Fossil ostracods were not recognised as such until Desmarest described Oligocene freshwater ostracods from the Auvergne in 1813 (see Oertli, 1982). Indeed, the very name "ostracoda" was only coined in 1806 by Latreille. Ure was the first to describe and illustrate British fossil ostracods, although not the first to illustrate fossil ostracods because Wilckens had already illustrated some from Germany in 1769. Baker in 1753 had given the first illustration of any ostracod with his figure of a living freshwater species. Oertli (1982) has given a full account of these early workers. If David Ure's work did not lead directly to any understanding of the Ostracoda, his influence did lead eventually to advancements in the study of British Carboniferous ostracods. Members of the newly formed Geological Society of Glasgow, under the leadership of John Young, made numerous collections during the 1860's which were described by R.T.Jones and his coworker, Kirkby. Jones and Kirkby addressed

the Society in April, 1867 and started the lecture by honouring David Ure (Jones & Kirkby, 1867).

David Ure figured five specimens of ostracods which he placed into three different species. The best known of these is, appropriately enough, *Amphissites urei* (Jones & Kirkby 1860). Some specimens of this species from the Ure Collection of the Hunterian Museum, are illustrated in Text Fig.1. The material came from near East Kilbride, some 11 miles to the southeast of Glasgow, from the Lower Limestone Group of Brigantian age. The illustrations show the variation of ornamentation within this species; note the stronger reticulation in fig.A, and differences in the development of the central vertical ribs. Figs E and F are distorted; the specimens were probably lying parallel to the bedding planes, so some distortion may be due to tectonism rather than simple compaction of the enclosing shales.

REFERENCES

- Burns, J.H. 1993. David Ure (1749-1798) 'Breadth of Mind and Accuracy of Observation'. *Glasg. Nat.*, 22,259-275.
Jones, T.R. & Kirkby, J.W. 1867a On the Entomotraca of the Carboniferous rocks of Scotland. *Trans. Geol. Soc. Glasgow*, 2, 213-228.
Oertli, H.J. 1982. Early Research on Ostracoda and the French contribution. In Bate, R.H., Robinson, E., & Sheppard, L.M. (Eds), *Fossil and Recent Ostracods*, Ellis Horwood, Chichester, 454-478.
Ure, D. 1793. *The History of Rutherglen and East-Kilbride*, published with a view to promote the study of antiquity and natural history, David Niven, Glasgow, 334p.

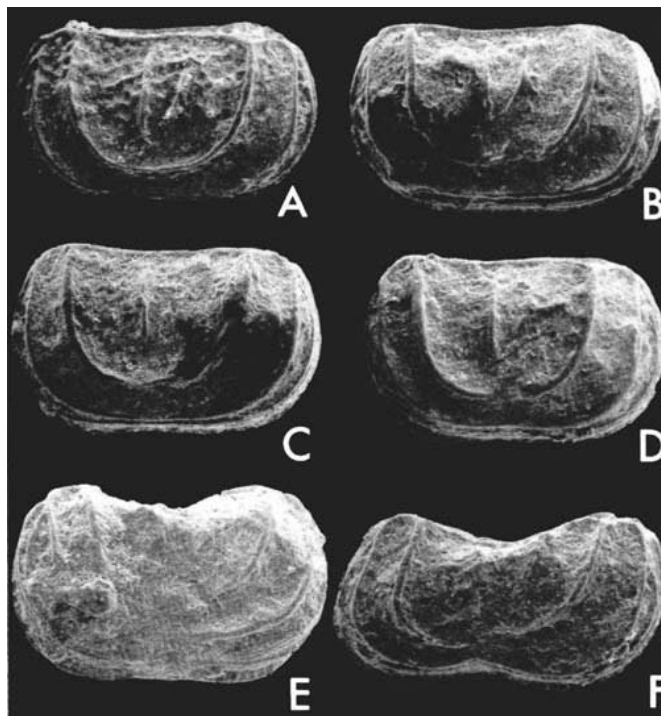


Fig. 1. Specimens from the Ure Collection, Hunterian Museum. Figs A-F. *Amphissites urei* (Jones & Kirkby 1860), x62.